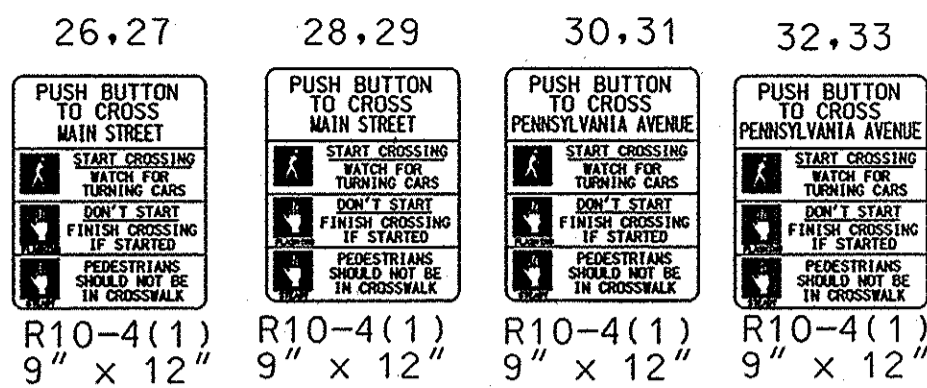
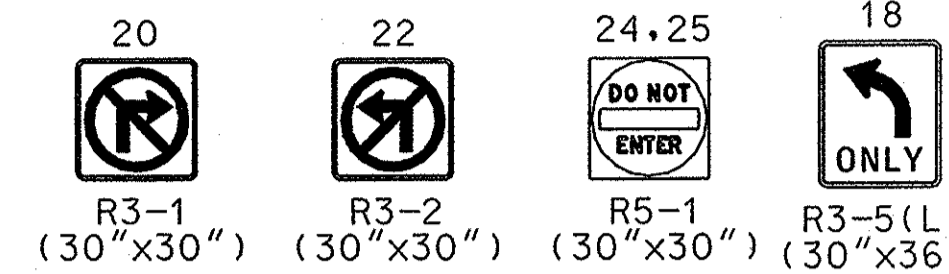


## PROPOSED SIGNS

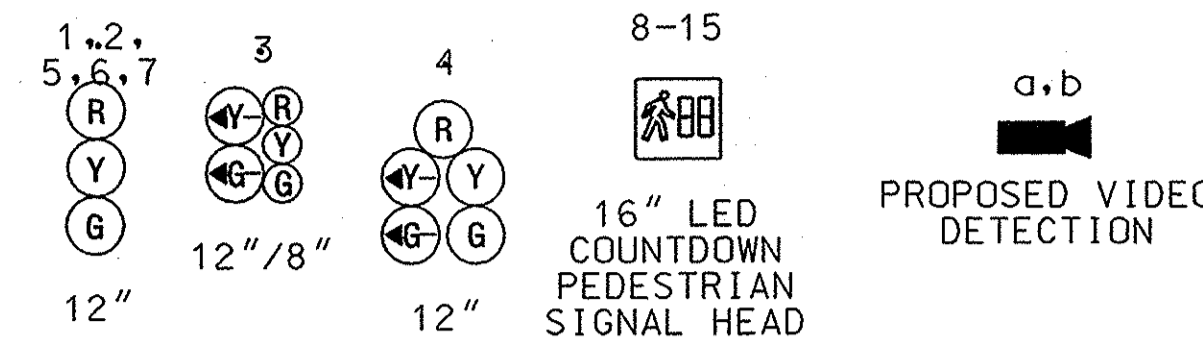
16  
Pennsylvania AVE  
Kimmie WAY  
D-3-2  
(VAR. x32")



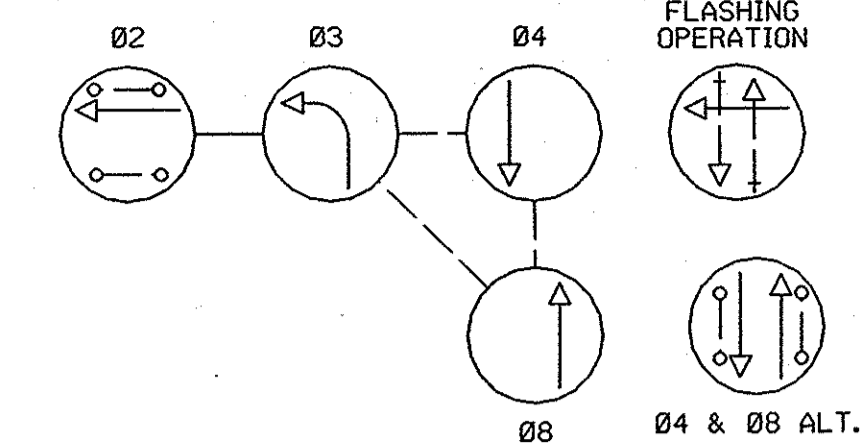
MAIN STREET PENNSYLVANIA AVENUE



## PROPOSED SIGNALS

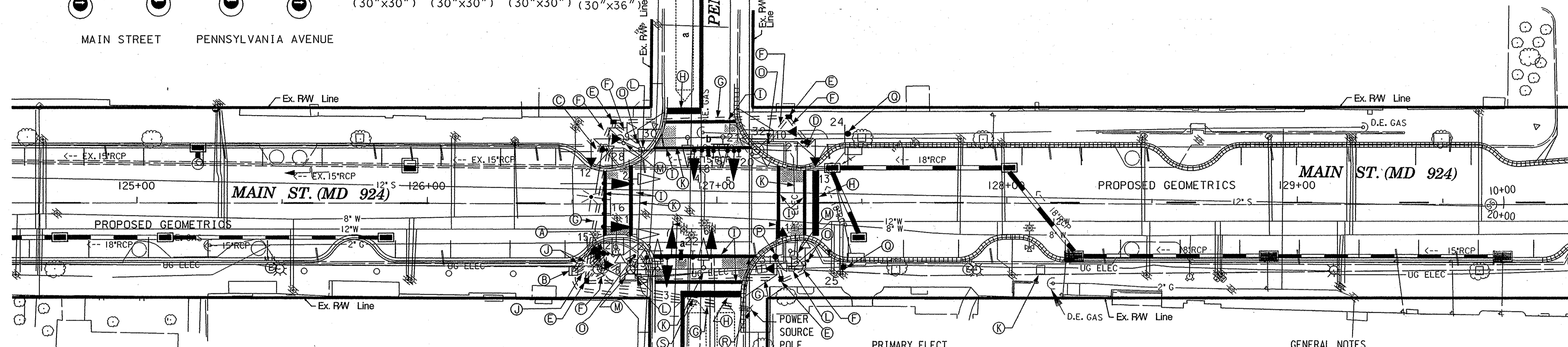


## NEMA PHASING



NOTE:  
PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.  
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

MD 924 IS ASSUMED TO RUN  
IN A EAST/WEST DIRECTION



## CONSTRUCTION NOTES.

- (A) INSTALL 27 FOOT STEEL POLE (PAINTED BLACK) WITH 38 FOOT MAST ARM (PAINTED BLACK), LED BLACK FACED SIGNAL HEADS, 16" LED BLACK FACED COUNTDOWN PEDESTRIAN SIGNAL HEADS, AND NEMA PHASE 5 STRETCH POLE MOUNT CABINET AND CONTROLLER. (NOTE: TWO 3 INCH PVC 90 DEGREE CONDUIT BEND AND ONE 2 INCH 90 DEGREE CONDUIT BEND).
- (B) INSTALL SERVICE PEDESTAL.
- (C) INSTALL 27 FOOT STEEL POLE (PAINTED BLACK) WITH 50 FOOT MAST ARM (PAINTED BLACK), LED BLACK FACED SIGNAL HEADS, 16" LED BLACK FACED COUNTDOWN PEDESTRIAN SIGNAL HEADS, 10 FT. STREET LIGHTING (PAINTED BLACK) ARM WITH 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINAIRE (NOTE: ONE 3 INCH PVC 90 DEGREE CONDUIT BEND AND ONE 2 INCH 90 DEGREE CONDUIT BEND).
- (D) INSTALL 10 FT. BREAKAWAY PEDESTAL POLE (PAINTED BLACK) WITH PUSH BUTTONS AND R10-4(1) SIGNS, 16" LED BLACK FACED COUNTDOWN PEDESTRIAN SIGNAL HEADS. (NOTE: ONE 3 INCH PVC 90 DEGREE CONDUIT BEND).
- (E) INSTALL ELECTRICAL HAND HOLE.
- (F) INSTALL 3 INCH SCHEDULE 80 PVC CONDUIT - TRENCHED.
- (G) INSTALL 4 INCH SCHEDULE 80 PVC CONDUIT - SLOTTED.
- (H) INSTALL 24 INCH WHITE PREFORMED PAVEMENT MARKING (STOP LINE).
- (I) INSTALL 12 INCH WHITE PREFORMED PAVEMENT MARKING (CROSS WALK).
- (J) INSTALL 4 INCH SCHEDULE 80 PVC CONDUIT - TRENCHED.
- (K) ABANDON EXISTING CONDUIT.
- (L) REMOVE EXISTING ELECTRICAL HAND HOLE.
- (M) REMOVE EXISTING SIGNAL POLE, SIGNAL HEADS AND EQUIPMENT. REMOVE EXISTING FOUNDATION TO A MINIMUM OF TWO FEET BELOW FINISHED GRADE.
- (N) VIDEO DETECTION ZONE.
- (O) INSTALL 10 FT PEDESTAL POLE (PAINTED BLACK) CUT AND CAPPED TO AT LEAST 5 FT WITH PUSH BUTTON AND R10-4(1) SIGN (NOTE: ONE 3 INCH PVC 90 DEGREE CONDUIT BEND).
- (P) INSTALL 15'-0" "T" STEEL POLE WITH 50 FOOT MAST ARM CUT AND CAPPED TO 45 FEET (PAINTED BLACK), LED BLACK FACED SIGNAL HEADS, 16" LED BLACK FACED COUNTDOWN PEDESTRIAN SIGNAL HEADS, : ONE 3 INCH PVC 90 DEGREE CONDUIT BEND.)
- (Q) INSTALL GROUND MOUNTED SIGN.
- (R) INSTALL 2" STUB OUT, 1 FOOT FROM BASE OF POLE FOR POWER FEED ON EXISTING POWER POLE.
- (S) INSTALL 2 INCH SCHEDULE 80 PVC CONDUIT - SLOTTED CAP AND MARK CONDUIT 2 FEET ABOVE GRADE AT UTILITY POLE FOR USE BY VERIZON FORCES.

## GEOMETRIC LEGEND

— EXISTING  
— PROPOSED

## UTILITY LEGEND

—SD—SD— STORM DRAIN  
—G—G— GAS MAIN  
—W—W— WATER MAIN  
—S—S— SEWER MAIN  
—E—E— ELECTRIC CABLES  
—A—A— AERIAL CABLES  
—T—T— TELEPHONE CABLES  
—F—F— FIBER-OPTIC

1. PAVEMENT MARKINGS ARE NOT TO BE INSTALLED UNTIL LOOP DETECTORS AND CONDUIT INSTALLATION ARE COMPLETE.
2. THE CONTRACTOR SHALL CONFIRM GEOMETRICS PRIOR TO THE INSTALLATION OF THE SIGNAL EQUIPMENT.
3. PAVEMENT MARKING DETAILS ARE PROPOSED AND SHALL BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH S.H.A. STANDARDS.
4. SEE PAVEMENT MARKING SHEET FOR ADDITIONAL STRIPING.
5. STREET NAMES AND ROUTE MARKER SIGNS ARE TO BE INSTALLED PARALLEL TO THE ROADWAY FOR WHICH THEY APPLY.
6. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED TO AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS. HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS, TO MEET CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
7. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL NOTIFY MISS UTILITY PRIOR TO THE CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
8. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR FROM A 60" x 60" LEVEL LANDING AREA. A LEVEL LANDING AREA IS AN AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.

## GENERAL NOTES

9. LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.09 AND FIG. 4E.2 AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE". IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL A DESIGN WAIVER IS OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
10. PUSHBUTTONS ARE TO BE LOCATED SO THAT A PEDESTRIAN IN A WHEELCHAIR LOCATED ON THE LEVEL LANDING AREA DOES NOT HAVE TO REACH MORE THAN 18 IN.
11. THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
12. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.



**JOHNSON, MIRMIAN & THOMPSON**  
Engineering A Brighter Future®

72 Loveton Circle Baltimore, Maryland 21152-0949

## APPROVALS

## REVISIONS

TEAM LEADER  
ASST. DIV. CHIEF  
DIVISION CHIEF  
OFFICE DIRECTOR

REVISIONS  
(M) H1865184  
9-1-2007 RECONSTRUCT SIGNAL  
DUE TO GEOM. CHANGES  
CGM/...



STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION

**MD 924 (MAIN ST.) STREETSCAPE IMPROVEMENTS  
FROM MD 22 (FULFORD AVE.) TO GORDON ST.  
(DESIGN BUILD)**

**MD 924 (MAIN ST) @ PENNSYLVANIA AVE.**

SCALE 1" = 20' DATE \_\_\_\_\_ CONTRACT NO. **AW-104-501-585**

DESIGNED BY **H. KILAN** COUNTY **HARFORD**  
DRAWN BY \_\_\_\_\_ LOGMILE **12092405.69**  
CHECKED BY \_\_\_\_\_ T.I.M.S. NO. **G-985**  
F.A.P. NO. \_\_\_\_\_ TOD NO. **TS-1476M**

DRAWING NO. **TS - 09** OF **14** SHEET NO. **10** OF **15**

PLOTTED: 10/30/07 2:25:52 PM  
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